

In the Specification

Please amend the paragraph beginning on page 13, line 2 as follows:

Fig. 3 illustrates an exemplary algorithm for demand-based cardiac function therapy as could be implemented by appropriate programming of the implantable device controller. Starting at step 300, the device initiates cardiac function therapy such as stress reduction pacing or resynchronization pacing with a specified pacing mode and using a specified pulse output configuration and pulse output sequence. At step 301, either at periodic intervals or upon command from an external programmer via the telemetry interface, the device suspends further delivery of cardiac function therapy. At step 302, the device next begins an assessment of the patient's cardiac function using one or more sensing modalities. In this embodiment, the device computes cardiac output by measurement of the heart rate and cardiac stroke volume via the intra-thoracic impedance method. The patient's exertion level 303 (e.g., either activity level or minute ventilation) is then measured and compared with the measured cardiac output measurement at step 303 to determine whether the patient's cardiac output is adequate for that particular exertion level. Based upon this comparison a first cardiac function parameter CFP1 may be computed at step 304 which, if below a specified threshold level, indicates inadequate cardiac function. Next, the patient's autonomic balance is assessed at step 305, and a second cardiac function parameter CFP2 is computed which is indicative of the extent of metabolic stress experienced by the patient. This parameter can also be compared with a specified threshold value for decision-making purposes. Based upon the computed cardiac function parameters CFP1 and CFP2, the device at step 306 decides whether the patient's cardiac function is inadequate. If so, the device continues cardiac function therapy by returning to step 300. If the computed cardiac function parameters indicate that the patient's cardiac function has improved to a sufficient extent, on the other hand, the device indefinitely suspends further delivery of cardiac function therapy at step 307.